

DAVID G. REICHERT
8TH DISTRICT, WASHINGTON



WASHINGTON OFFICE:
1730 LONGWORTH HOUSE OFFICE BUILDING
WASHINGTON, DC 20515-4708
TELEPHONE: (202) 225-7761
FAX: (202) 225-4282

COMMITTEE ON WAYS AND MEANS
SUBCOMMITTEE ON TRADE
SUBCOMMITTEE ON OVERSIGHT
SUBCOMMITTEE ON SOCIAL SECURITY

DISTRICT OFFICE:
2737 78TH AVENUE, SE, SUITE 202
MERCER ISLAND, WA 98040
TELEPHONE: (206) 275-3438
TOLL FREE: (877) 920-9208
FAX: (206) 275-3437
www.house.gov/reichert

Congress of the United States
House of Representatives
Washington, DC 20515-4708

April 2, 2009

The Honorable David Obey
Chairman
House Appropriations Committee
H-218, The Capitol
Washington, DC 20515

The Honorable Jerry Lewis
Ranking Member
House Appropriations Committee
1016 Longworth House Office Building
Washington, DC 20515

Dear Chairman Obey and Ranking Member Lewis:

I am requesting funding in the FY 2010 Energy and Water Development Appropriations bill, EERE Account for algae to biofuels research. The entity to receive funding for this project is Bioalgene, Inc., located at 7703 SE 39th Street, Mercer Island, WA 98040. The funding would be used to build a community based algae to biofuels development center. I certify that neither I nor my spouse has any financial interest in this project.

I hereby certify that this request will be made publicly available on my Official Website as required by Chairman Obey's new Committee policy that only posted requests will be considered.

Consistent with the Republican Conference's policy on project requests, I hereby certify that to the best of my knowledge this request: (1) is not directed to an entity or program that will be named after a sitting Member of Congress; (2) is not intended to be used by an entity to secure funds for other entities unless the use of funding is consistent with the specified purpose of the earmark; and (3) meets or exceeds all statutory requirements for matching funds where applicable. I further certify that should this request be included in the bill, I will place a statement in the Congressional Record describing how the funds will be spent and justifying the use of federal taxpayer funds.

Sincerely,

DAVID G. REICHERT
Member of Congress



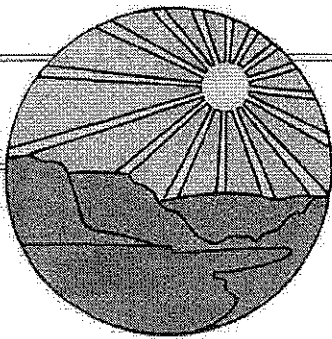
OFFICE OF CONGRESSMAN DAVE REICHERT (WA-08)

PROJECT REQUEST CERTIFICATION

By submitting this request for federal funding, I certify that:

- This project directly benefits the residents of Washington's Eighth Congressional District and merits federal funding assistance.
- None of the funds requested will be used for a new building, program, or project that has been named for a sitting Member of Congress.
- None of the funds requested will be used to secure funds for other entities unless the use of funding is consistent with the specified purpose of the project request.
- For requests where the receiving entity is not a unit of federal, state, or local government, or where the entity receiving the funding will not be providing support to a federal, state, or local government, or will not be providing research, the organization will provide matching funds, including in-kind contributions of 5% or more above the statutory requirement.
- For Department of Defense (DoD) project requests, the organization will submit a letter(s) preferably from a component or agency of the DoD indicating their support for the project. If the organization is unable to obtain a support letter from the DoD, please submit a letter from another recognized, independent professional organization (e.g., a college or university) indicating that the project has the appropriate military or commercial application.
- Under separate cover, I agree to provide a comprehensive plan outlining the sources of funding for the duration of the project; the percent and source of required matching funds, anticipated sources of the funding for the duration of the project, and a detailed budget for how federal funding assistance will be used to support the project.
- In the interest of transparency, all information submitted with this project request may be disclosed for public review.

PROJECT NAME:	ALGAL BIOFUELS DEVELOPMENT CENTER	
NAME OF PERSON CERTIFYING:	STANTON J. BARNES	
TITLE OF PERSON CERTIFYING:	CEO	
LEGAL NAME OF ENTITY MAKING REQUEST:	RUBY RENEWABLES, INC DBA	
LEGAL ADDRESS OF ENTITY MAKING REQUEST:	7703 SE 39TH ST, BLOALGANE	
	BOX 219, MERCER BLAND, WA. 98040	
SIGNATURE:	J. Barnes	DATE: 4/2/09



CITY OF GOLDENDALE

1103 SOUTH COLUMBUS GOLDENDALE, WASHINGTON 98620

March 27, 2009

TO WHOM IT MAY CONCERN:

The City of Goldendale highly supports the efforts of Bioalgene to establish a Research and Development Center in Moxee, Washington that will support their efforts to manufacture biofuels and other byproducts from algae. This center will also support a proposed production facility in Goldendale, Washington. These efforts will help create future "green" energy jobs. Your careful consideration of this request is appreciated.

Sincerely,

Larry Bellamy

City Administrator

FY2010 APPROPRIATIONS REQUEST FORM

REPRESENTATIVE DAVE REICHERT (WA-08)

GENERAL INFORMATION

Organization making request: **Bioalgene, Inc.** Federal Tax Status: (i.e. 501(c)3) **C Corp.**

Address: **7703 SE 39th St.**
Mercer Island, WA 98040

Point of Contact(POC): **Stan Barnes**

Phone: **206-734-7323** Email: **stanb@bioalgene.com**

Address: **7703 SE 39th St.**
Mercer Island, WA 98040

DC Representation (if any): **None**

Phone: Email:

Address:

City: State: ZIP Code:

PROJECT/PROGRAM INFORMATION

PROJECT TITLE: **) Algae-to-BioFuels Processes and Equipment Development Center**

Prioritized: 1 of 1 total requests for your organization

Appropriations Bill: (Please check)

 Agriculture

 Commerce, Justice, Science

 Defense

 X Energy and Water

 Interior and Environment

 State, Foreign Operations

 Labor, Heath and Human Services, and Education.

 Military Construction, Veterans' Administration

 Homeland Security

 Transportation, Housing and Urban Development

 Financial Services

 Legislative Branch

Agency/Bureau (i.e. FBI; Corps of Engineers; etc.): **Energy Efficiency and Renewable Energy, DOE.**

Account (): **Biomass Feedstocks, and Advanced technologies for Integrated Biorefineries**

Amount requested for FY2010: **\$ 2,511,975**

Total cost of project: \$ **4,800,000**

Minimum amount of FY2010 funding needed to begin or sustain this project: **\$1,500,000**

Is this program authorized? ☐ YES ☒ X NO If YES, bill number: Year:

Is this program funded in the President's FY10 budget request? ☐ YES ☒ x NO If YES, amount: \$

Anticipated total future requests: **\$ 2,288,025** Over the next **3** years

Local, state and/or private funding sources: **possible State, Boeing, Puget Sound Energy.**

(Bioalgene has received funding from Boeing as part of an earlier demonstration project, the City of Moxee has allowed us to use the existing facility without charge in good faith that our business will prosper and create jobs and tax revenue for the local economy. Puget Sound Energy has agreed to supply us with CO2 and there are several other cities where we are developing facilities: Everett, WA; Boardman, OR; Sacramento, CA; Corvallis, OR, Goldendale, WA. We work with communities to capitalize on existing infrastructure and provide natural processes to solve waste and fuel problems with a single solution. This proposal helps Bioalgene, but more importantly it is an investment in American communities, where the local government and business community are already working together.)

Total Amount: \$ **4,800,000** Over the next **3** years

Other sources of Federal funding: **Possible DOE Biofuels Research and Development Center Grant**

Total Amount: \$ **25,000,000** Over the next **5** years

Federal Agency Sponsor or Program Manager:

Office:

Phone Number:

Other agency advocate (if any): **Chris Cassidy, USDA Rural Development Loans Director**

Office:

Phone Number: **202-841-6097 chris.cassidy@wdc.usda.gov**

Are you requesting this through any other office(s): **NO** If yes, which office(s):

PROJECT FUNDING HISTORY (FROM CURRENT YEAR BACKWARD) **No prior Federal funding**

FISCAL YEAR	PRESIDENT'S REQUEST	ORGANIZATION'S REQUEST	FUNDING AMOUNT
APPROPRIATIONS BILL ACCOUNT, SUBACCOUNT			

Executive Summary/Project Description (MAXIMUM 200 Words):

Bioalgene proposes to build a community based Algae-to- BioFuels Development Center in Moxee, Washington that will develop processes and equipment to harvest up to 8 different natural strains of Algae simultaneously. These tools will be used in communities throughout the Northwest to grow Algae for Fuel, Fertilizer and Animal Feed. We are currently working with Washington State University, Seattle University, PNNL, and LANL and have some of the most advanced Algae researchers on our team. We need a place where we can develop optimum production techniques. Developing this capability in Moxee, where the city has given us the use of an existing facility creates a financial advantage for the community and for our process. Moxee is ideally located in the center of Washington. New equipment and products can easily be shipped to customers in other states and countries.

Boeing funded Bioalgene's \$150,000 initial algae species evaluation with WSU staff. The City of Moxee donated its decommissioned wastewater plant where Bioalgene grew 1700 gallons of high-yield algae. The site is ideal to produce algae and to develop equipment and systems for municipal and utility uses worldwide, providing jobs and export income for Washington through the 8th Cong. District. This project will not only help American Energy Independence it also contributes to building sustainable independent communities with jobs and industry that cannot be outsourced.

Our process provides major product advantages and lowest-cost economies through:

- a. Working with Communities to build on existing infrastructure to create a sustainable source of fuel, fertilizer, and animal food, from a natural organism (algae) using existing waste streams, CO₂ and sunlight.
- b. Absorption of dense CO₂ streams from coal- or gas-fired utilities, using sunlight
- c. Free nutrients from municipal or animal wastewater streams
- d. Reduced transport costs, higher security, reduced emissions from domestic production
- e. New sustainable jobs that reduce oil imports

Bioalgene proposed an ARRA project with City of Goldendale and Puget Sound Energy, and is proposing other projects to DOE. Continuing operation of a productive development center in Washington State will create new technologies, products and jobs in a high-growth, high-benefit new industry.

Justification of funding:

This project deserves funding for three compelling reasons: 1) We are a community based business developing a solution that turns two waste products, by using a natural process, into Fuel, Fertilizer and Animal Food. 2) Algae output/acre far exceeds other bio-fuel sources and 3) our process is sustainable – it builds local jobs that cannot be out-sourced, and grows fuel, fertilizer and animal food to create revenues. As we have mentioned above we are working within existing communities to use their infrastructure to build our Algae based business. The facility that the City of Moxee allows us to

use to grow Algae is ideal for isolating Algae Strains and would otherwise have cost us millions of dollars to acquire. Moxee let us use this facility because they believe we will succeed and will create new jobs and revenues for a small rural town. To date we have grown about 1700 gallons of high yield algae at this site.

The algae we have developed at Moxee has accelerated our demonstration projects for Boeing and at the Coal Fired Power plant in Boardman, OR. We are currently developing projects with other cities (Goldendale, WA; Everett, WA, Corvallis, OR, Sacramento, CA). We have already started the work to secure facilities in other communities to develop this technology in a way that supports and strengthens the local community. The Bioalgene process uses natural Algae (not a human food) as a feedstock to produce oil, fertilizer and animal feed, at production rates that far exceed any other type of biodiesel or ethanol (Algae production of oil is in the range of 2,000-5,000 gallons per acre, where other food oriented bio-fuel production rates are less by an order of magnitude of at least 10).

First-generation ethanol and biodiesel used food crops that resulted in higher food and fuel costs and added to market volatility for both food and fuel. Even "cellulosic ethanol with a somewhat greater net energy benefit" has both volume and power outputs far less than Algae. Finally, our process is completely sustainable, it uses natural resources (sun, CO₂, and nutrients from waste products) to create the oil, animal feed and fertilizer. We are not competing with a human food crop, in fact we are using waste products to improve human sustainability and lessen the non natural impact on our environment. The CO₂ cycle for algae bio-diesel prevents additional CO₂ from fossil fuel sources.

Having a national leader in Algae Biofuel research and development within the 8th Congressional District would benefit not only our district but the entire State and Nation. Our Algae Development Center is located in Moxee largely because the City of Moxee believed in us and made available their retired Waste Water Treatment Plant. They believe our team and our process can make a difference. Puget Sound Energy, another of our partners, is also based in the 8th Congressional District and generates power throughout the Northwest. PSE will supply CO₂ to Bioalgene, , to demonstrate low-cost, high-yield potential of algal fuels produced from "waste" CO₂ and nutrients. The fuels can power mass transit in King County to increase employment and economic productivity, reduce reliance on foreign fuels, and reduce pollution.

Algal oil is also the most likely source of Bio Jet A, required for airlines to meet European Union emissions restrictions that take effect in 2012. Bio-algae will create 20-100 direct green sustainable jobs, and as we build facilities the indirect jobs will be in the thousands. The fuels we produce will indirectly preserve thousands of King County and 8th CD jobs, and will both increase efficiency and reduce emissions for Puget Sound Energy. Instead of our fuel money going outside the State it will be circulated within the State, providing more Washington Revenue for each dollar invested.

DOE is expected to offer competition for an integrated algal biorefinery in 2010. The presence of a working development center will greatly increase chances to win one of these projects for Washington State and deliver its jobs and productivity benefits to the 8th District.

Specific language proposed for Congressman's request to the subcommittee (if any):

We request 4.8 million dollars to staff and equip a community based Algae Bio Fuel Development Center in Moxee, Washington to create new technologies and equipment to accelerate volume production and growth rates for natural strains of Algae. This development center will employ local residents in addition to researchers from Washington State University and Seattle University. Its main facility is a decommissioned waste water treatment facility in the community of Moxee, WA.

Community leaders encourage Bioalgene to use their old wastewater plant to develop a community based business to provide revenues and jobs based on new technologies in a rapidly growing market.

Bioalgene, Inc. has established relationships and demonstration projects with Boeing (to develop Bio Jet A Fuel), Portland General Electric (to grow Algae using exhaust from a 585 MW Coal Fired Power Plant), and Everett, WA (removal of contaminants). The company has also developed integrated production capabilities at Goldendale, WA, Corvallis, OR, Lakeview, OR, and Sacramento, CA.

Particularly noteworthy are: the use of naturally occurring algae, use of existing or retired WWTP facilities and waste CO₂, and development of relationships with communities throughout the Northwest. Funding this project empowers our communities to tackle fuel dependency and greenhouse gas issues on a broad and comprehensive scale. Bioalgene has developed a unique business model that combines our research institutions, communities and businesses to work towards the same goal. This Government funding will leverage the investments already made by the communities and restore jobs and revenues to several rural municipalities.

Is there any other relevant information regarding this request that you would like to share?

Algae-to-Biofuels Development Center - Project Budget and Schedule

A. TOTAL Task Element Cost	Total Project Cost	Months to complete
1. Project administration/management	\$225,000	24
2. Construct ponds, install processing equipment	\$585,250	3
3. Connect gas, water and power lines.		
Admit gas, water and algae, begin cultivation.	\$205,500	3
4. Monitor system performance,		
adjust to optimize and maintain equipment	\$197,625	20
5. Test optimized system	\$37,500	3
6. Continue harvests, dewatering, algae processing	\$330,000	20

7. Extract fuel feedstocks and biomass products	\$650,000	continuing
8. Review and adjust system performance	\$30,000	continuing
9. Upgrade equipment components & performance	\$87,500	6
10. Materials, equipment Transport, documentation	\$163,600	As required
Total costs and months needed to complete:	\$2,511,975	24

B. TOTAL Cost by Budget Object

Salaries: \$430,500

Benefits: \$ 86,100

Indirect costs: \$107,625

Contracts: \$650,000

Materials: \$257,500 Algae stocks, pond liners and covers, permitting, professional svcs.

Equipment : \$585,250 Centrifuge, ball mill, belt filter press, ultrasound extractor

\$205,500 Pumps. Lines, fluid management equipment

\$ 87,500 Monitor and control instrumentation

Travel: \$ 47,000

Other: \$ 55,000 Insurance, fees, licenses

Total Object Costs: \$2,511,975